Cardiovascular diseases burden in Italy, 1990–2017: the Global Burden of Disease Study

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Background:

Cardiovascular diseases (CVDs) are still the leading cause of mortality, morbidity and disability in Europe. Consequently, an exhaustive estimation of CVDs burden and cardiovascular risk factors impact is crucial for healthcare planning and resource allocation. In Italy, data on CVDs burden are sparse. This study aims to assess the global Italian CVDs burden and to analyze time changes from 1990 to 2017 within the country and in comparison to other European states.

Methods:

We used data from the 2017 Global Burden of Diseases (GBD) study to estimate CVDs prevalence, mortality and disability-adjusted life-years (DALYs) in Italy from 1990 to 2017. We also analyzed burden attributable to CVDs-related risk factors. Finally, Italian estimations were compared to those of the other 28 European Union countries.

Results:

CVDs were still the first cause of death (34.8% of total mortality) in Italy in 2017. A significant decrease in CVDs burden was observed since 1990: age-standardized prevalence (-12.7%), mortality rate (-53.75%), and DALYs rate (-55.54%) all decreased. Similar patterns were observed also in the majority of European countries. Despite these trends, all-ages CVDs prevalent cases increased from 5.75 million to 7.49 million. More than 80% of CVDs burden could be attributed to known modifiable risk factors such as high systolic blood pressure, dietary risks, high LDL cholesterol, and impaired kidney function.

Conclusions:

Data showed a decline in cardiovascular mortality and DALYs, which reflects the success in terms of reducing disability, premature death and early incidence of CVDs. However, the burden of CVDs is still high, as population aging and the increased prevalent cases require more access to care and generate more years lived with disability, which in turn leads to higher costs for the National Health Service and society. More efficient prevention strategies at community and individual level are needed.

Key messages:

- Despite decreasing trends in CVDs mortality and DALYs, the burden of CVDs is still high in Italy.
- A joined approach of the National Health System stakeholders is needed to keep reducing the CVDs burden.